



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/932,982	08/21/2001	Todd Lagimonier	003636.0115	6823

7590 07/30/2008
MANELLI DENISON & SELTER PLLC
ATTN: William H Bollman
2000 M Street NW
Suite 700
Washington, DC 20016

EXAMINER

PYZOCHA, MICHAEL J

ART UNIT	PAPER NUMBER
----------	--------------

2137

MAIL DATE	DELIVERY MODE
-----------	---------------

07/30/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/932,982

Applicant(s)

LAGIMONIER ET AL.

Examiner

MICHAEL PYZOSHA

Art Unit

2137

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 May 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-43 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-43 is/are rejected.
- 7) ☒ Claim(s) 1-43 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
- Paper No./Mail Date: _____

- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date: _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. Claims 1-43 are pending.
2. Amendment filed 05/28/2008 has been received and considered.

5

Specification

3. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: The specification does not provide support for the increasing of the size of acceptable nonce values based on the largest nonce value yet seen as
10 claimed. At best the specification provides support for the range to be dynamically based on certain parameters, none of which are the largest value yet seen (see specification page 17 lines 2-4).

Claim Rejections - 35 USC § 112

- 15 4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

20

5. Claims 1-43 are rejected under 35 U.S.C. 112, first paragraph, as failing to
comply with the written description requirement. The claim(s) contains subject matter
which was not described in the specification in such a way as to reasonably convey to
one skilled in the relevant art that the inventor(s), at the time the application was filed,
25 had possession of the claimed invention. Each independent claim recites a similar

limitation requiring increasing of the size of acceptable nonce values based on the largest nonce value yet seen. However, the specification lacks support for this limitation. At best the specification provides support for the range to be dynamically based on certain parameters, none of which are the largest value yet seen (see
5 specification page 17 lines 2-4). Therefore, the claims contain subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

10 ***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

15 (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over

20 Gouda et al. (Anti-Replay Window Protocol for Secure IP) in view of Milliken (US 6978384).

As per claims 1, 10, 19, 28, and 36, Gouda et al. discloses determining a largest nonce value yet seen from a plurality of nonce values of out-of-order messages (see page 311 section II); comparing a nonce value of a received message with said largest
25 nonce value yet seen (see page 312 Case iii); comparing said nonce value to an acceptance window in response to said nonce value not exceeding said largest nonce

value yet seen (see page 311 Case i and Case ii); adjusting a range of acceptable nonce values within said acceptance window, where the size of said range is based on said largest nonce value yet seen (see pages 313 and 314 section V); rejecting said received message in response to said nonce value falling outside said acceptance window (see pages 311 and 314 Case i); in a secure peer to peer communication (see Abstract).

Gouda et al. discloses changing the sliding window based on the largest nonce value yet seen as shown on pages 311 and 314, but fails to explicitly disclose increasing the size of the window.

However, Milliken teaches a sliding window with a varying size (see column 3 lines 56-61 where one of ordinary skill in the art recognizes that varying can mean increases and decreasing).

At the time of the invention it would have been obvious to a person of ordinary skill in the art to vary the size of the window in the Gouda et al. system.

Motivation to do so would have been to account for different data rates or maximum delay change (see Milliken column 3 lines 56-61).

As per claims 2, 3, 11, 13, 20, 21, 29, and 37, the modified Gouda et al. and Milliken system discloses designating said nonce value as said largest nonce value yet seen in response to said nonce value exceeding said largest nonce value yet seen (see

Gouda et al. page 312 Case iii).

As per claims 4, 12, 22, 30, and 38, the modified Gouda et al. and Milliken system discloses adjusting an acceptance window based on said nonce value exceeding said largest nonce value yet seen (see Gouda et al. page 312 Case iii).

As per claims 5, 7, 14, 16, 23, 25, 32, 34, 40, and 42, the modified Gouda et al.
5 and Milliken system discloses designating said received message as a replay attack (see Gouda et al. Abstract).

As per claims 6, 8, 15, 17, 24, 26, 33, and 41, the modified Gouda et al. and Milliken system discloses comparing said nonce value to a window mask value in response to said nonce value falling within said acceptance window; rejecting said
10 received message in response to an outcome of said comparison of said nonce value to said window mask value being true (see Gouda et al. page 311 Case ii).

As per claims 9, 18, and 27, the modified Gouda et al. and Milliken system discloses designating said nonce value as a largest nonce value seen (see Gouda et al. page 312 Case iii).

15 As per claims 31 and 39, the modified Gouda et al. and Milliken system discloses said secure communication module is further configured to reject said received packet in response to said nonce value falling outside said filter (see Gouda et al. page 311 Case i).

As per claims 35 and 43, the modified Gouda et al. and Milliken system discloses
20 said secure communication module is further configured to reject said received packet in response to said nonce value fails to fall within said filter and said secure

communication module is further configured to designate said received packet as part of a replay attack (see Gouda et al. page 311 Case i and the Abstract).

Response to Arguments

- 5 8. Applicant's arguments with respect to claims 1-43 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in
10 this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP
§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37
CFR 1.136(a).

- A shortened statutory period for reply to this final action is set to expire THREE
MONTHS from the mailing date of this action. In the event a first reply is filed within
15 TWO MONTHS of the mailing date of this final action and the advisory action is not
mailed until after the end of the THREE-MONTH shortened statutory period, then the
shortened statutory period will expire on the date the advisory action is mailed, and any
extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of
the advisory action. In no event, however, will the statutory period for reply expire later
20 than SIX MONTHS from the date of this final action.

Art Unit: 2136

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Wilson and Lakshman teach methods of increasing the size of a sliding window.

Any inquiry concerning this communication or earlier communications from the
5 examiner should be directed to MICHAEL PYZOSHA whose telephone number is (571)272-3875. The examiner can normally be reached on Monday-Thursday, 7:00am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Emmanuel Moise can be reached on (571) 272-3865. The fax phone
10 number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.
15 Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information
20 system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MJP

Art Unit: 2136

/Nasser G Moazzami/

Supervisory Patent Examiner, Art Unit 2136